

COMMENTS ON THE PROPOSED USE OF THE PLENARY POWERS TO STABILIZE THE GENERIC NAMES *CARCHARHINUS* BLAINVILLE, 1816, *CARCHARODON* SMITH, 1838, AND *ODONTASPIS* AGASSIZ, 1838. Z.N.(S.) 920

(see volume 18, pages 273-280)

By E. Tortonese (*Museo Civico di Storia Naturale, Genova, Italy*)

(1) It does not seem necessary to suppress the name *Carcharias* Rafinesque, 1809, for the purposes of the Law of Priority, repealing the ruling given in Opinion 47. *Carcharias* Raf. is clearly a synonym of the later *Odontaspis* L. Agassiz, 1838, and has been largely used in the modern literature. It is found in Bigelow-Schroeder's book on Selachians (Fishes W.N. Atlantic), which surely is, and will be for a long time, of basic importance. As everybody knows, the name *Carcharias* has been the subject of many discussions, until it was agreed that it must be applied to the "sand shark" and its allies. It would be now rather surprising to have it suppressed and to see once more changed the name of such well-known sharks. The preservation of the name *CARCHARIIDAE* is involved of course.

(2) I fully agree that the name *Carcharhinus* Blainville, 1816, must be preserved and have a definite type. *Carcharias milberti* Müller-Henle, 1839, is a good choice, but it must be pointed out that this name is a synonym of *Squalus plumbeus* Nardo, 1827 (see: E. Tortonese, Boll. Pesca, etc. Rome, XXVI, V, 1, 1950, p.11—E. Tortonese, Doriania, Genoa, I, 20, 1951, p.3). In the first of these papers, I made the proposal that *plumbeus* would become the type-species of *Carcharhinus*. It is regrettable that no type-specimen of *Squalus plumbeus* is in existence, as far as I know. Perhaps it would be preferable to have as type of the genus a valid species, instead of a synonym as *milberti* is.

No objections, in my opinion, are to be made concerning the name *Carcharodon*, *Prionace*, etc. as dealt with in the paper quoted above.

By E. I. White and N. B. Marshall

Professor Tortonese seems to us to have missed the main point in the matter of the replacement of *Carcharias* Rafinesque by *Odontaspis* Agassiz.

Until Opinion 47 was published in 1912 *Odontaspis* was, so far as we know, universally used for over 70 years for the sand-sharks, and *Carcharias* for the carcharinids, and no confusion between the two groups was possible. After this ruling *Odontaspis* was replaced by *Carcharias* by the few Recent zoologists, who have had to deal with only two accepted species, *O. ferox* and *O. taurus*, and four rare or doubtful species; but with negligible exceptions *Odontaspis* has always been used by palaeontologists for the 50 or more fossil species which are repeatedly referred to in the geological literature, both palaeontological and stratigraphical, *Carcharias* or *Carcharinus* being generally used for the 40 extinct species of carcharinids.

As it is, readers must know the date of the identification (i.e., before or after 1912), when the name *Carcharias* is mentioned, before they know to which group of sharks reference is being made. This may not be unduly difficult for Recent zoologists with so few species of living sand-sharks involved; but for palaeontologists dealing with over 50 species constantly quoted in geological literature, the situation would be intolerable. Such a ruling would doubtless be ignored as it has been in the past. That Bigelow and Schroeder (1948, p.98) have used *Carcharias* instead of *Odontaspis* for one species, *C. taurus*, cannot be accepted as a factor of importance.

Further, we would point out that Opinion 47 is partly based on an error, since it clearly states that *Carcharias taurus* is the type of *Odontaspis* Agassiz, which it is not—*C. ferox* is; Bigelow and Schroeder (idem.) make the opposite mistake in regard to *Triglochis* Müller and Henle, of which the type is *C. taurus*.

Opinion 47 was one of the most deplorable rulings of the Commission from the palaeontologists' point of view, and if followed would cause endless confusion. It was regretted even by its authors.

Finally, Professor Tortonese remarks that the preservation of the family name "Carchariidae" is involved. The removal of this equivocal name from the Official List of Family Names, used for about a century for carcharinids and since 1912 by some zoologists for odontaspids, is urgent.

By Wolfgang Schmidt (*Geologisches Landesamt Nordrhein-Westfalen*)

In a proposal by White, Tucker and Marshall there is a demand to re-establish *Odontaspis* Agassiz, 1838, as a name for the sand-shark, and to do away with the ambiguity that the use of *Carcharias* Rafinesque, 1809, produces.

I feel that this proposal is very useful. In the geological literature *Odontaspis* has been universally used almost without exception even to the present day. Therefore I support this proposal.

By H. A. Toombs (*British Museum (Natural History), London*)

The stabilization of the generic name *Odontaspis* Agassiz is very desirable, not only for the palaeontologist and curator, but also for the stratigrapher. The teeth of sharks of this genus are the commonest vertebrate fossils brought to the Museum for identification and the name has appeared in almost every faunal list of marine Caenozoic fossils published in the past hundred years. The suppression of the generic name *Carcharias* Rafinesque would not cause comparable inconvenience to zoologists since there are so very few recent species.

So little seems to be known about the relationships of the Atlantic forms of *Carcharinus* to those of the Australian region that it might be as well to ignore *Pterolamiops* (and *Eulamia*) at present and be content with defining *Carcharinus* and its type-species.

By Wilhelm Weiler (*Worms/Rh., Germany*)

In this case the rigorous application of the International Code of Zoological Nomenclature is not to be recommended. The consequences would be disadvantageous because in the geological and palaeontological literature *Odontaspis* has been universally used even to the present day instead of *Carcharias* Rafinesque, 1809. Therefore I recommend energetically the proposal of Messrs. White, Tucker, and Marshall, to avoid complications and confusions in the future.

By E. M. Casier (*Institut Royal des Sciences Naturelles de Belgique, Bruxelles 4*)

Ayant pris connaissance de la récente note de MM. E. I. White, D. W. Tucker et N. B. Marshall, je me permets de vous faire savoir que je souscris pleinement aux arguments exposés par ces auteurs en faveur de choix du terme générique *Odontaspis* de préférence à *Carcharias* qui a beaucoup contribué à jeter la confusion. Le premier terme est adopté par la quasi-totalité des paléichthyologistes et c'est celui que j'ai toujours utilisé dans mes publications où il m'a été donné de traiter de la dentition de "sand-sharks", notamment dans mon mémoire, en cours de publication (Mem. British Museum, Nat. Hist.) sur la Faune ichthyologique du London Clay.

By J. P. Lehman, (*Institute Paléontologie, Muséum National d'Histoire Naturelle, Paris, France*)

Comme le Docteur White le propose je souhaite voir réemployé le nom d'*Odontaspis* de manière à supprimer toute ambiguïté en ce qui concerne le nom de *Carcharias*.

By E. Kuhn-Schnyder (*Paläontologischen Institutes und Museums der Universität Zurich, Switzerland*)

I agree with the proposal made by Dr. Errol I. White to re-establish *Odontaspis* as a name for the sand-shark, and to do away with the ambiguity that the use of *Carcharias* produces. In our paleontological literature *Odontaspis* is generally used, because the application of the International Rules would be very harmful in this case.

By B. Schaeffer (*The American Museum of Natural History, New York*)

I wish to support the proposals listed in Vol. 18, pp. 277-279. The need for re-establishing the name *Odontaspis* has been clearly set forth in this paper, as well as the reasons for suppressing the name *Carcharias*.